AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claim 1 (currently amended): A method of inhibiting the activity of a toxic material or substance in a human or non-human animal patient in need thereof, which comprises administration to the patient of an effective amount of a dendrimer having a plurality of terminal groups, wherein at least one of said terminal groups has an anionic- or cationic-containing moiety bonded or linked thereto, wherein said toxic material or substance is released from a biological organism, and wherein said toxic material or substance is selected from the group consisting of (i) toxins and toxic peptides of biological origin and (ii) toxins and toxic peptides released during bacterial, protozoal [,] or fungal ~~or viral~~ infection.

Claim 2 (previously presented): A method according to claim 1, wherein said dendrimer comprises a polyvalent core covalently bonded to at least two dendritic branches, and extends through at least two generations.

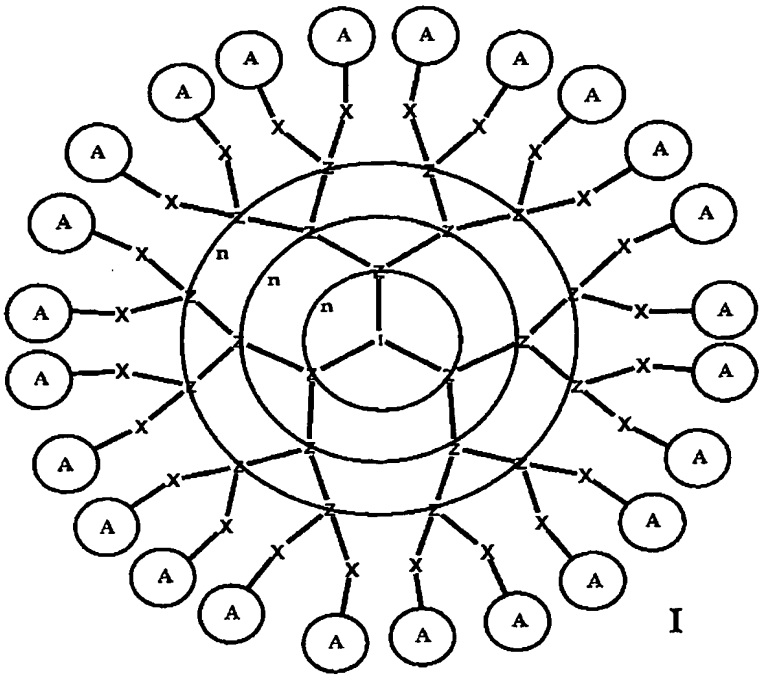
Claim 3 (original): A method according to claim 2 wherein said dendrimer is a polyamidoamine dendrimer based on an ammonia core.

Claim 4 (original): A method according to claim 2 wherein said dendrimer is a polyamidoamine dendrimer based on an ethylene diamine core.

Claim 5 (original): A method according to claim 2 wherein said dendrimer is a polylysine dendrimer based on a benzhydrylamine or other suitable core.

Claim 6. (original): A method according to claim 2 wherein said dendrimer is a poly(propyleneimine) dendrimer.

Claim 7 (presently presented): A method according to claim 2 wherein said dendrimer is a polyionic dendrimer of the general formula I:



wherein:

I is an initiator core;

Z is an interior branching unit;

n is an integer which represents the number of generations of the dendrimer; and

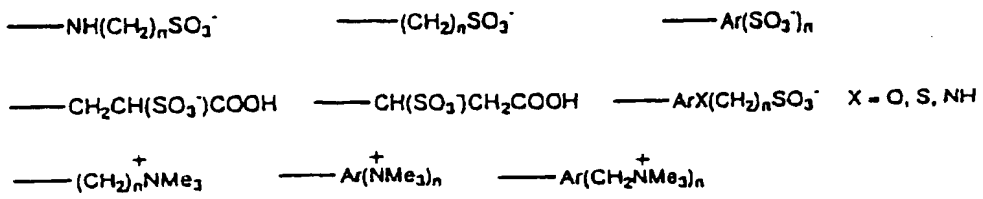
A is an anionic- or cationic- containing moiety which may be linked to interior branching unit Z through an optional linking group X.

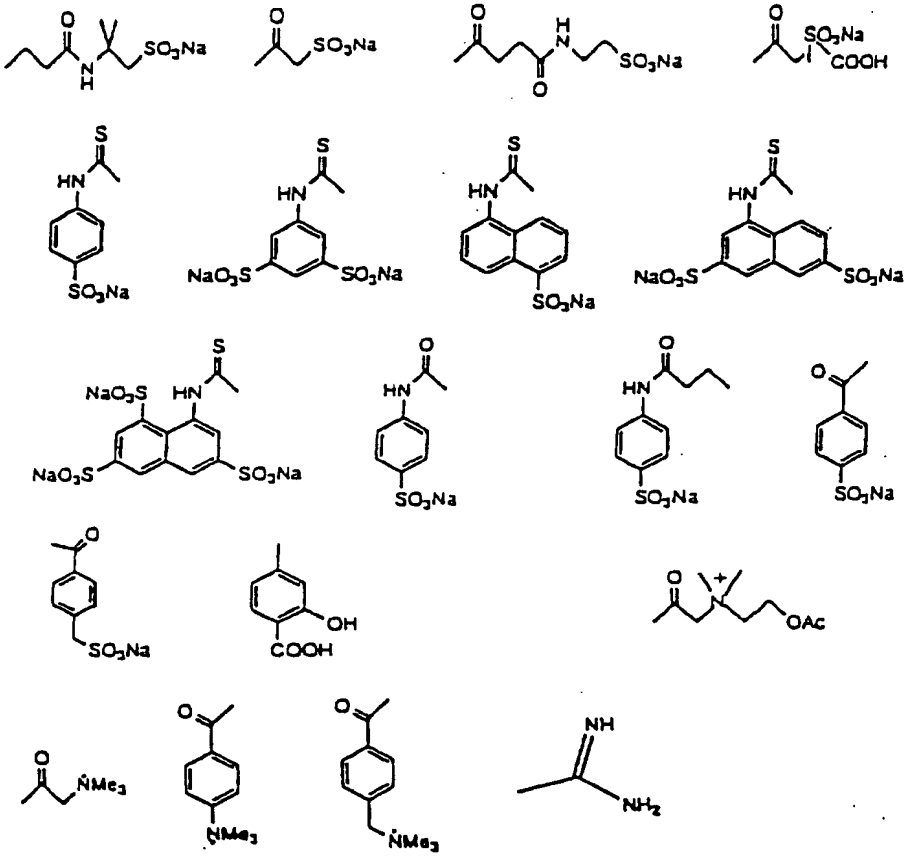
Claim 8 (previously presented): A method according to claim 1, wherein in said dendrimer said anionic- or cationic-containing moiety or moieties are bonded to amine, sulfhydryl, hydroxy or other reactive terminal groups of the dendrimer by amide or thiourea linkages.

Claim 9 (previously presented): A method according to claim 1, wherein in said dendrimer said anionic- or cationic-containing moieties are selected from the group consisting of sulfonic acid-containing moieties, carboxylic acid-containing moieties, neuraminic and sialic

acid-containing moieties, modified neuraminic and sialic acid-containing moieties, boronic acid-containing moieties, phosphoric and phosphonic acid-containing moieties, esterified phosphoric and phosphonic acid-containing moieties, primary, secondary, tertiary or quaternary amino-containing moieties, pyridinium-containing moieties, guanidinium-containing moieties, amidinium-containing moieties, phenol-containing moieties, heterocycles possessing acidic or basic hydrogens, and zwitterionic-containing moieties.

Claim 10 (previously presented): A method according to claim 1, wherein in said dendrimer the moiety or moieties which are bonded to amino or other reactive terminal groups of the dendrimer are selected from the following groups, in which n is zero or a positive integer:



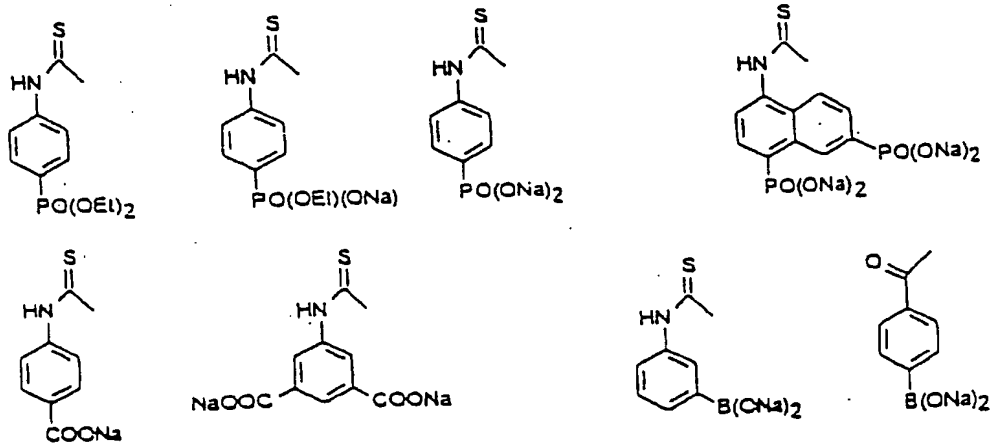


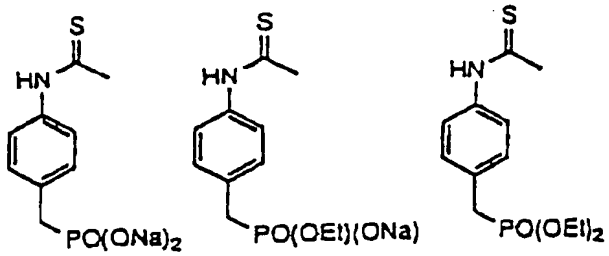
——ArXP(=O)(OR)$_2$ X=O, CH_2, CHF, CF_2 R=alkyl, aryl, H, Na.

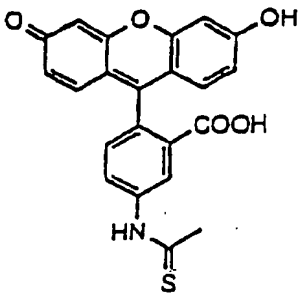
——ArXP(=O)(OR^1)(NR^{2}R^3) X=O, CH_2, CHF, CF_2 R^1=alkyl, aryl, H, Na R^2, R^3=alkyl, aryl

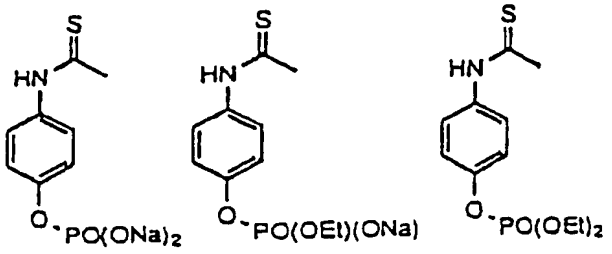
——Ar[P(=O)(OR)$_2$]$_n$ R=alkyl, aryl, H, Na n=1-3

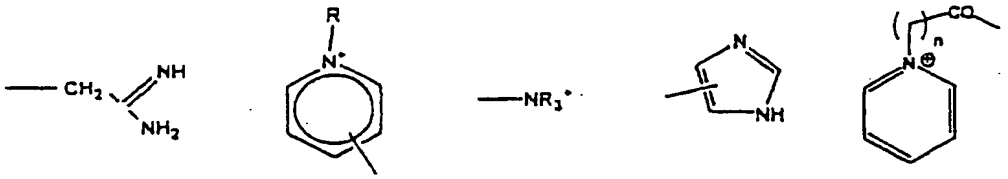
——Ar[B(OH)$_2$]$_n$ n=1-3 ——Ar[COOH]$_n$ n=1-3

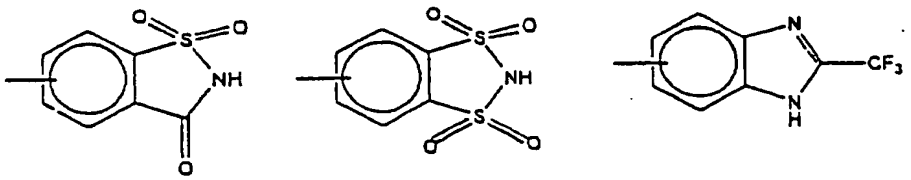


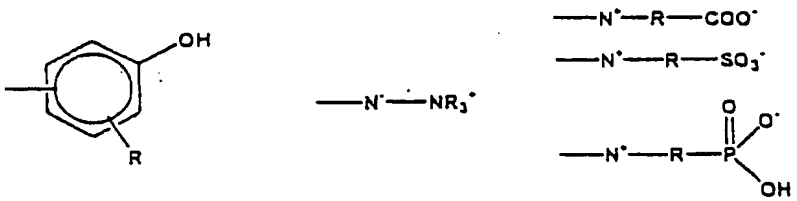


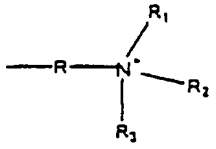




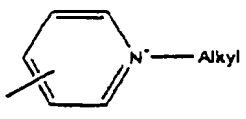








R= alkyl or arylalkyl; R_1, R_2, R_3 (which may be same or different) = alkyl or arylalkyl



Claim 11 (previously presented): A method according to claim 1, wherein said dendrimer is selected from the group consisting of:

i. alkylsulfonic acid terminated dendrimers;
ii. sulfoacetamide terminated dendrimers;
iii. sulfosuccinamic acid terminated dendrimers;
iv. N-(2-sulfoethyl) succinamide terminated dendrimers;
v. 4-sulfophenylthiourea terminated dendrimers;
vi. 3,6-di-sulfonaphthylthiourea terminated dendrimers;
vii. 4-sulfonaphthylthiourea terminated dendrimers;
viii. 3,5-di-sulfophenylthiourea terminated dendrimers;
ix. 3,6,8-tri-sulfonaphthylthiourea terminated dendrimers;
x. 4-(sulfomethyl) benzamide terminated dendrimers;
xi. 4-sulfobenzamide terminated dendrimers;
xii. N-(4-sulfophenyl) propanamide terminated dendrimers;
xiii. 4-sulfophenylurea terminated dendrimers;
xiv. N,N,N-tri-methylglycinamide terminated dendrimers;
xv. 4-trimethylammonium benzamide terminated dendrimers;
xvi. 4-(trimethylammoniummethyl)benzamide terminated dendrimers;
xvii. N-(2-acetoxyethyl)-N,N-(dimethylammonium)methyl-carboxamide terminated dendrimers;
xviii. guanidino terminated dendrimers;
xix. 4-([1,4,8,11-tetraazacyclotetradecane]methyl)benzamide terminated dendrimers;
xx. 4-carboxy-3-hydroxy-benzylamine terminated dendrimers;
xxi. 4-carboxyphenylamide terminated dendrimers;
xxii. 3,5-dicarboxyphenylamide terminated dendrimers;
xxiii. 4-phosphonooxyphenylthiourea terminated dendrimers;
xxiv. 4-(phosphonomethyl)phenylthiourea terminated dendrimers;

xxv. ethyl-4-(phosphonomethyl)phenylthiourea terminated dendrimers;

xxvi. (8-octanamido)-5-acetamido-3,5-dideoxy-2-thio-D-glycero-α-D-galacto-2-nonulopyranosidoic acid terminated dendrimers;

xxvii. (11-undecanamido)-5-acetamido-3,5-dideoxy-2-thio-D-glycero-α-D-galacto-2-nonulopyranosidoic acid terminated dendrimers;

xxviii. (acetamido)-5-acetamido-3,5-dideoxy-2-thio-D-glycero-α-D-galacto-2-nonulopyranosidoic acid terminated dendrimers;

xxix. (4-butanamido)-5-acetamido-3,5-dideoxy-2-thio-D-glycero-α-D-galacto-2-nonulopyranosidoic acid terminated dendrimers;

xxx. (4-methylbenzamido)-5-acetamido-3,5-dideoxy-2-thio-D-glycero-α-D-galacto-2-nonulopyranosidoic acid terminated dendrimers;

xxxi. (8-octanamido)-4-azido-5-acetamido-3,4,5-trideoxy-2-thio-D-glycero-α-D-galacto-2-nonulopyranosidoic acid terminated dendrimers;

xxxii. (8-octanamido)-4-amino-5-acetamido-3,4,5-trideoxy-2-thio-D-glycero-α-D-galacto-2-nonulopyranosidoic acid terminated dendrimers;

xxxiii. 4-benzamidoboronic acid terminated dendrimers;

xxxiv. 3,5-dicarboxyphenylthiourea terminated dendrimers;

xxxv. 4-phosphonooxyphenylthiourea terminated dendrimers;

xxxvi. 4-phosphonophenylthiourea terminated dendrimers;

xxxvii. 4,6-diphosphononaphthylthiourea terminated dendrimers;

xxxviii. fluoresceinthiourea terminated dendrimers;

xxxix. (phenyl-3-boronic acid)-thiourea terminated dendrimers;

xl. pyridinium dodecylcarboxamide terminated dendrimers; and

xli. saccharin terminated dendrimers.

Claims 12 to 15 (canceled)